

Amendments to the Claims:

This listing of claims replaces all prior versions and listing of claims in the application.

Listing of Claims:

1-44. (canceled)

45. (previously presented) A method for forming a dental model and base assembly comprising:

filling a cavity defined by a single piece encasement member with uncured casting material; the encasement member including an engagement structure extending into the cavity that engages the casting material in said cavity such that the cured casting material is fixed to the encasement member; said encasement member and cured casting material forming a dental model base; and

placing a cast dental model adjacent said uncured casting material in said cavity; said dental model being engaged with said dental model base when said casting material is cured;

wherein a pin is connected to said cast dental model and said pin extends into said uncured casting material when said dental model is placed adjacent said uncured casting material in said cavity.

46. (canceled)

47. (original) A method of attaching a dental model to an articulator comprising:

filling a cavity formed by an encasement member with uncured casting material;

placing a dental model adjacent said uncured casting material in said cavity; said dental model having at least one pin extending into said uncured casting material; said dental model being engaged with said casting material when said casting material is cured;

engaging a spherical connector with a concave portion of said encasement member; said spherical connector being connected to an articulator.

48. (original) The method of claim 47 wherein:
said spherical connector is glued into position after engaging the concave portion of said encasement member.
49. (original) The method of claim 48 wherein said spherical connector is connected to a plastic articulator.
50. (original) A method of attaching a dental model to an articulator comprising:
filling a cavity formed by an encasement member with casting material;
placing a dental model adjacent said uncured casting material in said cavity; said dental model being engaged with said casting material when said casting material is cured;
engaging a spherical connector with a concave portion provided at a first end of said encasement member; said spherical connector being at a first end of an articulator attachment plate;
rotating said articulator attachment plate around said concave portion of said encasement member until a latch on a second end of said articulator attachment plate engages a latch receiver at a second end of said encasement member; and
attaching said articulator attachment plate to an articulator.
51. (canceled)
52. (currently amended) The method of claim ~~[[51]]~~ 45 wherein said encasement member forms a ball and socket joint with ~~the~~ an articulator.
53. (currently amended) The method of claim ~~[[51]]~~ 45 wherein said encasement member detachably engages with an articulator attachment plate and said articulator attachment plate being adapted to be connected to ~~the~~ an articulator.
54. (currently amended) The method of claim ~~[[51]]~~ 45 wherein said encasement member has a slot at a first end; said slot adapted for receiving an articulator attachment tongue.

55. (original) The method of claim 54 wherein said slot is formed in an articulator attachment bar that slidably engages the encasement member first end.
56. (new) The method of claim 45, wherein said engagement structure includes at least one slanted surface that extends at an angle relative to a plane defined by a top surface of the dental model base upon which the cast dental model is placed.
57. (new) The method of claim 45, wherein said engagement structure includes at least one undercut structure to fix the cured casting material to the encasement member.
58. (new) The method of claim 45, further comprising coupling the encasement member to an articulator attachment plate, wherein the attachment plate extends along a bottom surface of the encasement member and is coupled to the encasement member with a ball and socket and latch connection.
59. (new) The method of claim 47 further comprising coupling an articulator attachment plate between the encasement member and the articulator.
60. (new) The method of claim 47 wherein said encasement member detachably engages with an articulator attachment plate and said articulator attachment plate is adapted to be connected to the articulator.
61. (new) The method of claim 47 wherein said encasement member has a slot defined at a first end, said slot adapted for receiving an attachment tongue of the articulator.
62. (new) The method of claim 61 wherein said slot is formed in an articulator attachment bar that slidably engages the encasement member first end.
63. (new) The method of claim 47, wherein said encasement member includes an engagement structure extending into the cavity that engages the casting material in said cavity
64. (new) The method claim 63, wherein said engagement structure includes at least one slanted surface that extends at an angle relative to a plane defined by a top surface of the dental model base upon which the cast dental model is placed.

65. (new) The method of claim 63, wherein said engagement structure includes at least one undercut structure to fix the cured casting material to the encasement member.
66. (new) The method of claim 47, further comprising coupling the encasement member to an articulator attachment plate, wherein the attachment plate extends along a bottom surface of the encasement member and is coupled to the encasement member with a ball and socket and latch connection.
67. (new) The method of claim 50, further comprising coupling at least one pin member between the dental model and the casting material in the cavity.
68. (new) The method of claim 50, wherein the encasement member includes an engagement structure that protrudes into the cavity for engagement by the casting material.